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EXAMINER

PADGETT, MARIANNE L

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1792

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/735,652	Applicant(s) CHUN-SHIEN, KO	
	Examiner MARIANNE L. PADGETT	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Applicant's amendment to the specification has removed the objection as set forth in section 4 of the action mailed 7/16/2007; the new drawings have corrected the objections as set forth in section 5; & the amendment to the claims have removed the objections & 112, second paragraph problems as set forth in sections 1 & 3, with the objection to claim 7 in section 2 being corrected by completing the sentence to claim a fan as the heat dispersing device.

It is noted that with the exception of noting that the limitations of original claims 2 & 4 have been put into the independent claim 1 by the amendment, applicant has not provided support for any of the amendments made in the claims, however the examiner notes that the addition of "fan" to claim 7 is supported by figures 6, 7, 7A, 8 & page 7, line 18, while the **configuration** described by the "wherein..." limitation added after the eighth step at the end of claim 1 finds support in the illustration of figure 8 & discussion found on pages 8, lines 5-14 & 19-22, plus page 9, lines 2-4 & 12-15, but only if the layer is aluminum oxide sand, not generic aluminum oxide.

It is further noted, that since original claim 4 was ambiguous as to which spray appliance to which it referred, it may be considered to provide literal support for the amended claim of depositing resin via sandblasting machine, it cannot be considered to providing able but therefore, especially considering that the logical process would have been considered by one of ordinary skill of the art to employ the sandblaster for the sand, not the resin & considered in light of the specification where all disclosures of resin deposition are via roller coating.

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the specification as originally filed, as illustrated by figure 6, 7 & 7A, and discussed on pages 5, lines 8-10; page 7, lines 1-3 & 24-27, and page 9, line 23, all indicate that the first resin layer (as well as the second resin layer) are deposited via roller coating, where the only original disclosure of depositing any resin layer via spraying is in "B." of original independent claim 1, i.e. in the body of the specification

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all discussion of resin layer deposition is either generic coating or roll coating, with no mention of spray coating of resin. The examiner notes that as generic spray coating is an old, well known conventional technique of depositing resins in layers, thus was not an enablement problem, however explicitly claiming use of a sandblasting machine for depositing resin is another matter entirely.

3. Claims 1 & 7-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Review of the specification found no enablement for employing a sandblasting machine for deposition of either generic resin or any specific form of resin, in fact as noted above, all specific examples of means for applying either the first or the second resin layer did so via roller coating, and all mention of spraying, including use of a sandblasting techniques, were specifically directed to application of the aluminum oxide sand (abstract; page 5, lines 10-11; page 7, lines 4-7 & 27-page 8, line 5 (sandblasting); page 9, lines 24-25 & page 10, lines 18-20), thus from the discussion in the body of the original specification it does not appear that there was actually intent to perform the process of the invention by spray coating resins, only by spray coating the aluminum oxide sand in between roller coated resins layers. For these reasons, enablement for using a sandblasting machine to deposit a resin layer is considered lacking.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for forming a layer of aluminum oxide sand via spraying, does not reasonably provide enablement for deposition via techniques that are not spraying, i.e. generically all deposition techniques. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to perform the invention commensurate in scope with these claims.

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Since the broadest disclosures of aluminum oxide sand deposition found in the specification or original claims was direct to spray deposition, or more specifically spray deposition via sandblasting, no enablement was found for broadening the scope of the aluminum oxide sand layer formation to read on any deposition technique, which is what the amendment to the third step in claim 1 has done.

With respect to the amended "fifth step" of claim 1, note that since "conforming" is used in the sense of conformal coating, and means that the conforming surface is following the surface shape of what it is conforming to, hence the language "an **upper surface** and a **lower surface** of the second layer substantially **conforming to each particle** forming the underlying layer of aluminum oxide" (emphasis added) may be considered to be that the particles deposited on the first resin layer are being individually encapsulated by the "second layer of photo-curing resin" & any location on the deposited & cured first resin layer + sand, which has no aluminum oxide sand sufficiently near will be entirely lacking in any second layer deposit, since if any second layer resin deposited in such a location, its upper surface could not be conformal to any adjacent particles. No enablement for producing such a configuration was found in the specification, where all written disclosure was found to require the sand blasted aluminum oxide to be completely attached to the first layer of resin such that it projected up from the surface of the first resin layer when cured. Nor does this amended claim language appear to be consistent with illustrated figure 8, as the illustrated sand particles (12) that project up from the unidentified matrix material, show a second resin layer (13) to be conformal to the individual particles (12) & the matrix surface, not to be conformally encapsulating individual particles, thus this do claim language would appear to have some enablement problems. (Note with respect to the unidentified "matrix" material surrounding a little oxide sand (12), one might guess that for the sand particles to be adhering & projecting from the first layer as discussed in the specification, that the unidentified matrix material between resins layers 11 & 13 is a mixture of sand blast deposited aluminum oxide & resin, since if it were pure sand deposit, it would fall

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off where not in contact with the resin, but due to the inconsistencies or omissions between the written disclosure & the illustration of figure 8, one can only guess.)

Further note that the enablement in the original specification & claims is for forming a layer of aluminum oxide sand, **not** for forming a layer of aluminum oxide, thus creating a further enablement problem the fifth step & the description of what produces the textured effect in the finished plastic floor tile in the "wherein..." limitation.

4. Claims 1 & 7-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 1, the amended additions to the fifth step, as well as in the "wherein..." limitation, which are not enabled for reasons as set forth above, are also lacking in support for the same reasons, thus encompass **New Matter**.

Broadening the scope of the independent claim to include any techniques for forming a layer of aluminum oxide sand is considered to be broader than the scope of the enabling disclosure, hence encompasses **New Matter**.

In new claim 8 applicant has claimed "the cooling method is a natural wind fan", however has provided no citation of support for the claim of "a natural wind fan" or discussion of exactly what it might encompass, and no such limitation was found by the examiner in the specification, thus claiming this subset of the general category of "fans" appears to have no basis in the original specification, hence is **New Matter**. The only written disclosures concerning fans found in the specification were generic, with heat dispersing station 600 of figure 7 illustrating the fan as a stylized rotary fan, which while it produces wind, is in no way natural.

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5. Claims 1 & 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of "natural wind fan" is unclear & as far as the examiner knows there is no such conventional terminology, however the literal meaning would be that the fan is provided by nature (i.e. palm leaves or the like) and moved by nature to produce wind, however what this is supposed to be is a mystery to the examiner.

Also had out with respect claim 8, that "the cooling method" lacks antecedent basis due to the use of inconsistent language with the terminology employed in the independent claim. For further purposes of examination, it will be considered that this limitation of claim 8 is preferring to the "seventh step of cooling...".

In independent claim 1, the meaning of the amended language in the "fifth step..." is unclear as written, since it is unclear how one can roller coat a resin on to a surface that is a composite of aluminum oxide sand on &/or attached to, a layer of cured resin, and conformally encapsulate the sand particles, but not conform to any of the first resin surface, unless of course the sand is thick enough for none of the second resin to contact any of the first resin, but of course then the top layer would just peel off due to be lack of adherence between individual sand grains, unless of course sand coating technique, plus roll coating was sufficient to mimic geological forces that make sandstone (although such speculation is not supported by the specification). It would make more sense & be consistent with illustrations & disclosure in the specification if the surfaces of the second resin layer were conformal with not the individual particles, but the overall surface of the composite of the aluminum oxide sand layer on, adhered to the first resin layer as cured, however while more logical & consistent with the specification, this is not what is literally claimed, thus providing some ambiguities in potential interpretations.

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Also note that "each particle forming the underlying layer of aluminum oxide" is inconsistent with preceding claim language, as no "particles" were previously introduced, only "sand" & no generic "layer of aluminum oxide" was formed, only the more specific "layer of aluminum oxide sand" (emphasis added) was formed. Also note in the added third to last line of claim 1, the presence of the same limitation lacking the "sand" of the layer that was actually claimed to have been formed.

In the last line of independent claim 1, note that "said spray appliance" (singular) is inconsistent with the only preceding step to which it may refer as amended, i.e. "a set of spraying appliances" (plural). Also, a sandblasting machine generally requires finely granulated material, however the resin is not defined as being a powder or the like, hence it is uncertain whether this limitation is supposed to somehow further limit the resin in order to enable it to be sprayed with a sandblasting machine, especially as the specification provides no enablement for such an effect on scope of the applied resin.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller, Jr. et al. (4,689,259), in view of Carling (2003/0068447 A1) or Colton et al. (2001/0051230 A1) or Hansson et al. (WO 01/47726 A1), further in view of Yamamori et al. (2001/0031352 A1).

The claims that amended to require deposition of the photo-carried resin via a sandblasting machine, which has noted above is not enabled by the body the specification, however as it is claimed, the reference of Yamamori et al. has been supplied to show that sandblast coating of a resin containing compositions is a known application techniques ([0010]), hence showing the capability of a "sandblast machine" of applying a resin base material for coating surfaces, where the exemplary ceilings & walls of buildings they be considered sufficiently analogous to floor tiles, such that it would've been obvious to

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one of ordinary skill in the art, given the previously presented rejection based on Miller, Jr. et al. (259), a view of the alternative references of Carling or Colton et al. or Hansen et al., who provide for the obviousness of alternatively applying a polymeric coating via spraying as opposed to roll coating, it would've been further obvious to one of ordinary skill of the art that the type of spray apparatus employed may also be capable of sandblasting, as the background disclosure in [0010] of Yamamori et al. indicates that sandblast coating of resinous paint materials was known.

Note concerning applicants amended language requiring texture & shape of the upper resin layer, that in Miller et al. (259), the illustrated product with the particles applied in a pattern, then coated with the surface resin, clearly shows the area of the pattern protruding above areas where there are no particles applied, hence reading on a textured surface with protuberances resultant from the applied particles, which may be aluminum oxide. Furthermore, note as illustrated in the subsection of the surface overlying the particles, the illustration does not show as smooth the surface as that in the area where no particles are applied, but indicates a waviness that corresponds, i.e. conforms, to the underlying particles, thus may be considered a further protuberance texture created by the particles, especially noting applicant's required "protuberances" may be of any size or dimension as long as they result from the underlying particulates (aluminum oxide). Particularly note in Miller et al. (259)'s claim 1, it is specifically claimed that "in the areas containing particles, providing an irregular surface having a second different gloss characteristic", hence clearly indicating a surface texture that would have been expected to encompass the claimed protuberances. It is noted that while the deposited areas of the upper resin coating that are not over particles cannot be conformal to them, this aspect of applicant's claims was either ambiguous or unsupported as discussed above, thus Miller et al.'s illustration may be considered to be encompassed by some of the various possible ambiguous meanings or intents as discussed above.

As previously set forth, Miller et al. (259) teach the production of vinyl floor tiles with decorative wear resistant surfaces, that includes **coating the plastic base material with a UV curable adhesive**

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material, **thereafter** cascading, flooding or sprinkling a mixture of **sand particles**, that may be **aluminum oxide** on the uncured adhesive (exemplary deposition is a printed pattern (screen printing, flexographic printing, etc.), but it is taught to possibly overall print the adhesive with an overall layer of particles deposited thereon). After removing excess, not adhered particles the adhesive is partially or completely cured with UV light, then a top or wear layer coating of UV curable material is roller coated thereon, followed by UV curing, such that all layers are completely cured. In Miller et al. (259) see the abstract; summary; col. 3, lines 10-47 & 65-68 especially lines 20, 30-35, 40-45 & 66; col. 5, lines 22-34 & 57-col. 6, lines 48, esp. col. 6, lines 4-13.

While the particle application techniques of Miller et al. (259) do not specifically state that the means of applying the particulate material (aluminum oxide or sand) is via a spraying apparatus, or specifically by use of a sandblasting machine (assuming it's even claimed for this step), the taught techniques described as cascades or flooding or sprinkles are all actions that can be considered to be affected by some sort of spraying technique, such that it would've been obvious to one of ordinary skill in the art to consider use of a spraying apparatus for application of the particles as taught, especially considering that the background on col. 1, lines 15-25 teaches that spraying of vinyl floor tiles with carborundum grit (synonym of aluminum oxide sand) for making non-skid surfaces is known in the prior art, thus suggesting a known means of providing the taught action. It is further noted that the claimed use of a "sandblast machine" does not necessitate any particular parameters used therewith, such that any apparatus that might be used to spray inorganic particulate materials/grit/sand may be considered to read on a machine capable of being called a sandblast machine.

It is noted that is described on col. 6, lines 30-44, that the UV curable top coating (wear coat) material is roller coated under heated conditions with subsequent curing with conventional UV lights at 4.5 Joules UV energy, which will inherently also cause some heating, hence the product at this point is heated, thus while there is no disclosure directed towards cooling, this resultant product will inherently

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undergo cooling, which since no specific discussion thereon is included, one of ordinary skill in the art would have expected that the cooling is via dissipation of the residual heat remaining in the product after curing, such that any object capable of conducting or absorbing heat which contacts the UV cured flooring tiles may be considered to aid in cooling (as long as it's not heated), thus be called a "heat dispersing device".

The process of Miller et al. (259) particularly differs by not using "a set of spraying appliance" for deposition of the first UV curable coating, i.e. their UV curable adhesive, using instead printing apparatus of various sorts, where those mentioned are inclusive of roller mechanisms, but do not particularly mention spraying techniques, however the application of UV curable polymeric materials, such as the acrylated polyester adhesive of Miller et al. (259) are well known to be applicable via many deposition techniques, inclusive of generic spraying as shown by either Carling (447: abstract; [0018-19]; [0038-40], especially [0040]), who applies photocurable liquid polyurethane onto tiles, where different methods of application are equivalently taught including spraying & roller coating; or Colton et al. (230: abstract; figure 1; [0027]; [0029-42]) who teaches applying protective surfaces on substrate inclusive of floor materials using radiation (UV) polymerizable coating materials to which grit or hard particles may be applied to the uncured coating for an antiskid surface, where it is taught that dependent on the viscosity of the coating material it may be brushed, rolled or sprayed onto the surfaces desired [0027], thus it would've been obvious to one of ordinary skill in the art, especially for Miller et al. (259)'s option of the initial layer of adhesive covering the whole surface, to apply the alternate coating means of spray deposition as a deposition technique that employ means, such as rollers or spray, are seen to be equivalently employed for blanket coating, hence would have been expected to be equivalently applicable or effective, where coating of the entire surface, i.e. "overall print", is employed as is taught to be possible.

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Alternately, Hansson et al. (abstract, figure, pages 9-10) shows that an alternative printing technique, used in depositing materials on substrates for wear resistant surfaces, is inkjet printing, which is desirable for the flexibility in design that it makes possible without disrupting or increasing the cost, thus providing an advantage over other printing processes, hence it would've been further obvious to one of ordinary skill in the art to employ the printing technique of inkjet printing in the Miller et al. process, particular where flexibility in design such as taught in the PCT reference to be desirable for floor materials, as Miller et al. (259) in teaching that the "adhesive can be applied by screen printing, flexographic printing, etc.", essentially suggest that any printing technique is considered applicable, with the PCT reference suggesting situations involving custom-designed or design varied over multiple tiles, where the inkjet technique would be advantageous for patterning techniques, which one of ordinary skill in the art would recognize as applicable to those as taught in Miller et al. that otherwise employ claimed coating sequences.

8. Claim 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller, Jr. et al. (4,689,259), in view of Carling (2003/0068447 A1) or Colton et al. (2001/0051230 A1) or Hansson et al. (WO 01/47726 A1), plus in view of Yamamori et al. (2001/0031352 A1), in further in view of young (2003/0017310 A1) or Russell et al. (2002/0073921 A1).

While as discussed above, cooling during or after a process which produces heat, especially heat that is in excess or unnecessary to the process, occurs naturally with no extra heat is input, and it would've been further obvious to facilitate or accelerate such cooling, if the heat can in any way interfere with storing or subsequent processing of the product produced, but the above combination does not provide an explicit teaching of employing a fan in order to cause or accelerate such cooling.

Young (310) teaches a coating deposition process that involves UV cure, as well as discussing post-curing sections, where cooler air is injected and a fan employed to circulate air around cured sheets, so as to optimize the post-curing section, such that cooling efficiency may be increased, reducing cooling

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time & allowing for employing smaller floor space "footprints" for the operation ([0091-94, especially 94]), hence it would've been obvious to one of ordinary skill in the art knowing that it is desirable to cool UV cured materials & advantageous to speed the curing for the efficiency of the process, to employ fans in the above combination to effect such cooling after curing, as the efficiencies and optimization of employing fans in the cooling process would have been equally desirable in the above combination for producing UV cured flooring tiles.

Alternately, Russell et al. (912) also teach the use of fans to provide cooling in a UV curing process, where the UV lamps are noted to produce heat & the fans are employed to cure the lights, and as seen in the figures 1-2, the position of the fans with respect to the lights would also provide wind from the fan, which would cool the floor surfaces be UV cured (figures 1 & 2, ref.#'s 64 fans & 25 for UV curing light; [0029]; [0036-37]). Therefore, as it is recognized that UV lamps create heat that may undesirably build up & that fans may be employed to provide cooling or reduce such heat, it would've been obvious to one of ordinary skill in the art to employ fans as taught to provide curing of any of the apparatus & process materials, where it is desirable to control & reduce heating effects from the UV curing lamps, hence to employ such fans with the UV curing in the above process, in order to reduce or eliminate heat built up of the UV curing lamps & in the substrates to which the UV is applied, to prevent heat damage to heat sensitive polymeric material &/or to enable shorter processing times before final slot operations such as storing or packaging, that would have been expected to be employed in any industrial production assembly line that employed processing steps, as in the above combination with Miller et al. (259).

9. Other art of interest relating to sandblasting techniques includes: Sturtevant et al. (6,509,084 B2: col. 15, lines 65-col. 16, line 12) is cumulative to the above rejection for teaching the application of friction enhancers to an uncured polymer layer after deposition be a spraying where the friction enhancer may be sand, sandblasting grit, etc., thus implying the usefulness of sandblasting spray applications in an analogous processing technique; Blankemeyer et al. (3,719,030: col. 1, lines 25-35)

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notes the presence of sandblasting effects that may be present in powder plastics brain processes, thus further substantiating expected applicability of a "sandblasting machine" when spray deposition is used or shown to be obvious as in the above combination; and Freeman et al. (4,968,538: col. 2, lines 1-6), who demonstrate a typical use of sandblasting, inclusive of using plastic grit in surface preparations, as opposed to deposition.

As previously noted, Miller, Jr. et al. (4,504,523) is equivalent to (259), except while teaching use of particles exemplified by silica or other particles, does not explicitly use aluminum oxide in their process, only mention its use in the background. The PCT publication to Hansson et al. (WO 01/47726 A1) is equivalent to Miller et al. (259) for the purpose of the rejection, particularly noting abstract; figure; pages 3, 5, 10, 12-13 & example 1 on pages 17-18, where the design applied to the surface to be coated with UV curable acrylic lacquer may be applied via inkjet printing. The patent to Chen et al. (6,228,463 B1; abstract; col. 4, lines 1-15 & 51-68; col. 5, lines 8-col. 6, line 5; col. 13, lines 51-65; start of examples on col. 16)) is equivalent to Miller et al. (259), except it has only "reverse-role coater" or generic teachings for application of the UV curable coatings wear layers, i.e. does not appear to teach either spray or roller coating thereof, just generic application.

The patent to Thompson (4,622,257: figures; abstract; col. 3, lines 20-56) was also of interest for putting nonskid surfaces on floor material using layers and aluminum oxide grit as claimed, but where the substrate is a fiber/cement mixture, rather than plastic.

The copending application 11/453,938 was noted to be of interest for employing a similar series of deposition steps of photosensitive resin with UV curing, but lacks the particle deposition step between the two layers. The Derwent abstract to CN1623681 (Nansheng Plastic IND, Co. LTD) is of interest for being directed to substantially the same process, but is not prior art.

10. Applicant's arguments filed 11/14/2007 & partially discussed above have been fully considered but they are not persuasive.

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Applicant's arguments with respect to claims 1 & 7-8 have been considered but are moot in view of the new ground(s) of rejection.

In paragraph bridging pages 8-9 applicants repeat the entirety of independent claim 1 & make the blanket statement that the combination of applied references does not suggest this. Such repetition of an entire page long claim's language provides no clear or distinct reason why the claims are differentiated. In specific discussion of the applied references, which starts on the paragraph bridging pages 7-8, and goes through the middle of page 8, applicants appears to be discussing limitations related to surface texture, i.e. protuberances resulting from the underlying layer of aluminum oxide [sand], which limitations were added in the present amendment, hence this discussion does not relate to the combination as applied to the original claims. Therefore, in effect applicant has provided no actual reasons or discussions on why "there is not the slightest suggestion in either Miller, Jr. et al., Colton, Carling, or Hansson et al. that their respective teachings may be combined as suggested by the Examiner" (page 10 of applicant's response), hence as presented their allegation of error in the examiner's previous rejection has no basis.

Assuming that applicant's arguments are actually trying to say that the previously applied rejection does not read on the claims as amended, it is noted by the examiner that the body of applicant's specification does not read on their claims as amended, since there is no suggestion in, nor enablement, or the remotest reason why one would sandblast resin onto a substrate as claimed, it nor that one would do the equivalent of encapsulating with a resin aluminum oxide sand particles deposited on another resin layer, given the teachings in the body of applicant's application.

With respect to applicant's discussion concerning Miller Jr. et al. (4689259), applicant alleges that in figure 1 of this patent "the translucent where layer 14 forms a substantially uniform upper surface...", but they fail to provide any citation of where Miller, Jr. et al. teaches this. Visually reviewing said figure 1, it is clear that layer 14 is conformal to the particles deposited on an underlying resin adhesive layer(12),

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where the portion of layer 14 over the particles is not shown to be completely planar, but has slight unevenness is drawn to correspond to unevenness in particle layer. Also claim 1 of Miller et al. (259) would appear to specifically contradict applicant's allegation concerning the upper resin layer, i.e. the translucent where layer 14 in Miller et al., forming a substantially uniform upper surface. Thus, Miller et al. (259) can be said to read on protuberances which are not of any specific size range, and where the overall pattern particle layer itself creates protuberances, noting that as phrased in applicant's claims, the claimed texture by protuberances could result from individual aluminum oxide grains or from overall segments of the coating, thus this claim language does not exclude configurations as illustrated by Miller Jr. et al. The secondary references were applied to show the obviousness of employing spraying techniques as opposed to roller coating techniques for application of the initial blanket or patterned resin layer, and applicant's arguments have provided no reasons or discussion why these spray techniques are not obvious alternatives. Furthermore, the examiner notes that Miller et al.'s process is actually closer to the process disclosed in the body of applicant's specification, than are applicant's own claims. However, the originally applied combination provided no reason why one would employ **sandblasting apparatus** to spray deposit resin layers, blanket or patterned (although neither does applicant's specification), hence the previous rejection was modified to be applicable to the claims as amended. It should be noted though, if the New Matter & non-enablement is removed from the claims, without adding other clearly supported & distinguishing process limitations, some variation of the previous rejection will again become applicable, i.e. Yamamori et al. will be removed.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing

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date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne L. Padgett whose telephone number is (571) 272-1425. The examiner can normally be reached on M-F from about 8:30 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks, can be reached at (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Marianne L. Padgett/
Primary Examiner, Art Unit 1792

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